

Attorney's Docket: 2002DE443
Serial No.: 10/727,770
Art Unit 1751
Response to Office Action of November 29, 2005

This listing of claims will replace all prior versions, and listings of claims in the application:

1.(Original) A liquid bleaching composition component comprising

- 1) amphiphilic copolymers which include structural units which are derived from
 - a) acryloyldimethyltauric acid in free, partially neutralized or completely neutralized form with mono- or divalent inorganic or organic cations and
 - b) at least one hydrophobic comonomer based on ethylenically unsaturated polyalkylene alkoxylates and optionally
 - c) further at least monovinylically unsaturated comonomers different from a) and b), and
- 2) at least one bleach activator, bleach catalyst or oxygen transfer agent.

2.(Original) The bleaching composition component as claimed in claim 1, in which the copolymers have a molecular weight M_w of from 10³ g/mol to 10⁹ g/mol.

3.(Original) The bleaching composition component as claimed in claim 1, in which the acryloyldimethyltaurates (structural unit a) are selected from a salt consisting of Li⁺, Na⁺, K⁺, Mg⁺⁺, Ca⁺⁺, Al⁺⁺⁺, NH₄⁺, monoalkylammonium, dialkylammonium, trialkylammonium tetraalkylammonium and mixtures thereof, where alkyl substituents of the amines are, independently of one another, (C₁-C₂₂)-alkyl radicals which may optionally be occupied by up to 3 (C₂-C₁₀)-hydroxyalkyl groups.

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4.(Original) The bleaching composition component as claimed in claim 1, in which, based on the total amount of the copolymers, the content of acryloyldimethyltauric acid or acryloyldimethyltaurates is 0.1 to 99.9% by weight.

5.(Original) The bleaching composition component as claimed in claim 1, in which the copolymer comprises, as macromonomers b), compounds according to formula (I)



in which

R^1 is a polymerizable function from the group of vinylically unsaturated compounds which is suitable for building up polymeric structures by free radical means,

R^2 is a linear or branched aliphatic, olefinic, cycloaliphatic, arylaliphatic or aromatic (C_1-C_{50})-hydrocarbon radical, OH, $-NH_2$, $-N(CH_3)_2$ or is the structural unit $[-Y-R^1]$, Y is $-O-$, $-C(O)-$, $-C(O)-O-$, $-S-$, $-O-CH_2-CH(O)-CH_2OH$, $-O-CH_2-CH(OH)-CH_2O-$, $-O-SO_2-O-$, $-O-SO-O-$, $-PH-$, $-P(CH_3)-$, $-PO_3-$, $-NH-$ and $-N(CH_3)-$, A, B, C and D are derived from the group consisting of acrylamide, methacrylamide, ethylene oxide, propylene oxide, AMPA, acrylic acid, methacrylic acid, methyl methacrylate, acrylonitrile, maleic acid, vinyl acetate, styrene, 1,3-butadiene, isoprene, isobutene, diethylacrylamide diisopropylacrylamide and mixtures thereof, v, w, x and z, independently of one another, are numbers from 0 to 500, where the sum of the four coefficients must on average be ≥ 1 .

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6.(Original) The bleaching composition component as claimed in claim 1, in which the molecular weight of the macromonomers b) is 200 g/mol to 10^6 g/mol.

7.(Original) The bleaching composition component as claimed in claim 1, in which the comonomers c) are olefinically unsaturated monomers selected from the group consisting of N-vinylformamide (VIFA), N-vinylmethylformamide, N-vinylimethylacetamide (VIMA) and N-vinylacetamide; cyclic N-vinylamides (N-vinyllactams) with a ring size from 3 to 9, preferably N-vinylpyrrolidone (NVP) and N-vinylcaprolactam; amides of acrylic acid and methacrylic acid, preferably acrylamide, methacrylamide, N,N-dimethylacrylamide, N,N-diethylacrylamide and N,N-diisopropylacrylamide; alkoxylated acrylamides and methacrylamides, preferably hydroxyethyl methacrylate, hydroxymethyl-methacrylamide, hydroxyethylmethacrylamide, hydroxypropylmethacrylamide and mono[2-(methacryloyloxy)ethyl] succinate; N,N-dimethylaminomethacrylate; diethylaminomethyl methacrylate; acryl- and methacrylamidoglycolic acid; 2- and 4-vinylpyridine; vinyl acetate; glycidyl methacrylate; styrene; acrylonitrile; stearyl acrylate; lauryl methacrylate and mixtures thereof.

8.(Original) The bleaching composition component as claimed in claim 1, comprising, as bleach activator, an organic compound with hydrolyzable O-acyl, N-acyl or nitrile groups.